WHAT IS CLAIMED IS:

1. A hydraulic brake apparatus comprising:

a tandem brake master cylinder having a rod piston and a floating piston, the rod piston moving in response to a brake-operating member, and the floating piston moving in response to the rod piston;

a separation valve provided in a hydraulic brake circuit connecting the brake master cylinder and a brake wheel cylinder, the separation valve being able to establish and shut off communication between the brake master cylinder and the brake wheel cylinder;

a pressure control valve unit for controlling fluid pressure to be supplied from an external fluid-pressure supply source to the brake wheel cylinder while the separation valve is in a shutoff condition; and

a stroke simulator mechanism for allowing an idle stroke of the rod piston and an idle stroke of the floating piston, while the separation valve is in the shutoff condition, so as to ensure a stroke of the brake-operating member in accordance with an input load to the brake-operating member,

wherein the idle stroke of the floating piston starts during the idle stroke of the rod piston.

2. A hydraulic brake apparatus according to claim 1, wherein the stroke simulator mechanism comprises a simulator piston, and the simulator piston starts its stroke after completion of the idle stroke of the floating piston and before or substantially upon completion of the idle stroke of the rod piston so as to ensure the stroke of the brake-operating member.